



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DETROIT HARVEST QUEEN
 Component
Diesel Engine
 Fluid
CITGO CITGUARD 600 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0001221	---	---
Sample Date		Client Info		06 Feb 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		12	---	---
Filter Age	hrs	Client Info		12	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	7	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m	>2	0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>30	<1	---	---
Lead	ppm	ASTM D5185m	>30	<1	---	---
Copper	ppm	ASTM D5185m	>30	3	---	---
Tin	ppm	ASTM D5185m	>15	1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

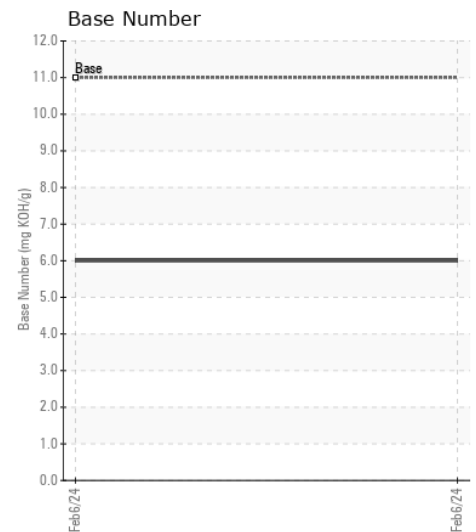
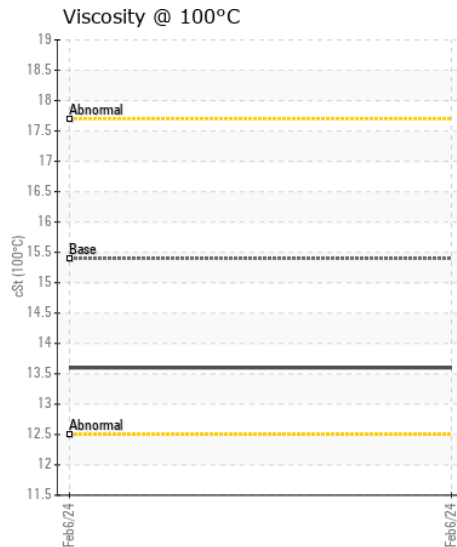
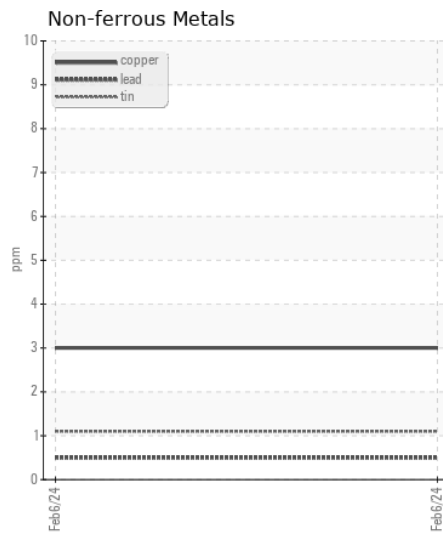
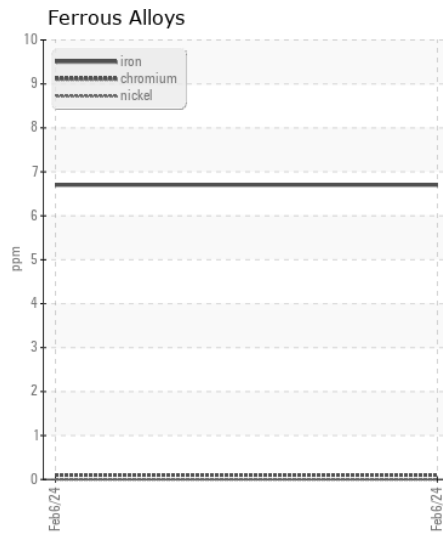
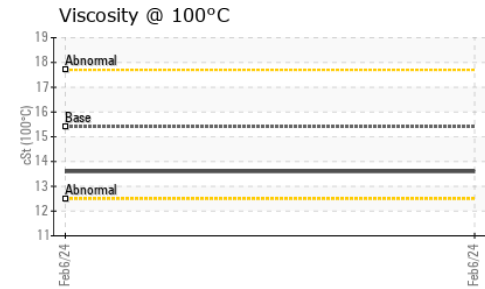
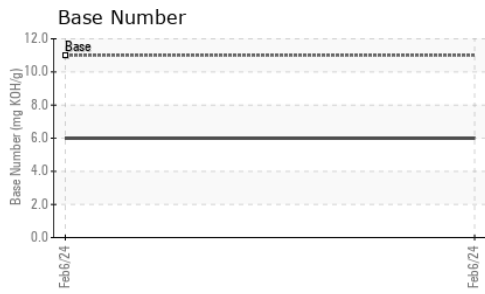
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	2	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Fuel		WC Method	>3.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	3.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	12.3	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m	13	7	---	---
Barium	ppm	ASTM D5185m	0	0	---	---
Molybdenum	ppm	ASTM D5185m	57	36	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	825	665	---	---
Calcium	ppm	ASTM D5185m	1100	802	---	---
Phosphorus	ppm	ASTM D5185m	933	751	---	---
Zinc	ppm	ASTM D5185m	1089	993	---	---
Sulfur	ppm	ASTM D5185m	2769	2457	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	6.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	6.0	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0001221 **Received** : 14 Feb 2024
Lab Number : 06089254 **Tested** : 15 Feb 2024
Unique Number : 10876699 **Diagnosed** : 16 Feb 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FT-IR, ICP, KV100, SCREEN, TBN)

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)